$\overline{}$	Туре	L#	Hits	Search Text	ĎBs	
-	BRS	L1	<b>—</b>	chi-conotoxin	USPAT; נ EPO; JPO	USPAT; US-PGPUB; 2003/( EPO; JPO; DERWENT 08:32
2	BRS	1.2	1	neuronal adj amine adj transporter	USPAT; l EPO; JPC	USPAT; US-PGPUB;   2003/0 EPO; JPO; DERWENT   08:32
ယ	BRS	L3	-	neuronal adj noradrenaline adj USPAT; US-PGPUB; transporter EPO; JPO; DERWEN	USPAT; EPO; JPO	USPAT; US-PGPUB;   2003/( EPO; JPO; DERWENT   08:33
4	BRS	4	<b>1</b>	chi-mria or chi-mrib	USPAT; EPO; JPO	USPAT; US-PGPUB;   2003/0 EPO; JPO; DERWENT   08:33
5	BRS	L5	447	conotoxin	USPAT; EPO; JP	USPAT; US-PGPUB; 2003/0 EPO; JPO; DERWENT 08:34
6	BRS	97	1	conotoxin same ((neuronal adj amine adj transporter) or (neuronal adj noradrenaline adj transporter))	USPAT; EPO; JP	USPAT; US-PGPUB;   2003/0 EPO; JPO; DERWENT   08:34
7	BRS	L7	0	chimeric same 1	USPAT; EPO; JP	USPAT; US-PGPUB; 2003/0 EPO; JPO; DERWENT 08:34
∞	BRS	L8	5039	(urinary or fecal) adj incontinence	USPAT; EPO; JP	USPAT; US-PGPUB; 2003/CEPO; JPO; DERWENT 08:35
9	BRS	L9	231693	(cardiovascular adj disease) or arrhythmia or (coronary adj heart adj failure) or (mood adj disorder) or depression or anxiety or cravings or (chronic adj pain) or (neuropathic adj pain) or (inflammatory adj pain)	USPAT; EPO; JP	USPAT; US-PGPUB; 2003/C EPO; JPO; DERWENT 08:35

	Туре	L#	Hits	Search Text	DBs	Time Stamp
10	BRS	L10	_	((cardiovascular adj disease) or arrhythmia or (coronary adj heart adj failure) or (mood adj disorder) or depression or anxiety or cravings or (chronic adj pain) or (neuropathic adj pain) or (inflammatory adj pain)) same (chi-conotoxin or (conotoxin same ((neuronal adj amine adj transporter) or (neuronal adj noradrenaline adj transporter))))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:37
11	BRS	L11	343	lewis adj richard.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:41
12	BRS	L12	2	alewood adj paul.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:40
13	BRS	L13	0	sharpe adj iain.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:42
14	BRS	L15	0	(11 or 12) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:39
15	BRS	L17	4	alewood adj p adj f.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:40
16	BRS	L18	31	lewis adj r adj j.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:41
17	BRS	L19	2	sharpe adj i adj a.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:42
18	BRS	L20	<b></b>	(17 or 18 or 19 ) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/29 08:42

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FILE 'MEDLINE' ENTERED AT 08:46:04 29 AUG 2003
FILE 'CAPLUS' ENTERED AT 08:46:04 ON 29 AUG 2003
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FILE 'SCISEARCH' ENTERED AT 08:46:04 ON 29 AUG 2003
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FILE 'AGRICOLA' ENTERED AT 08:46:04 ON 29 AUG 2003
=> s chi-conotoxin
                  2 CHI-CONOTOXIN
=> duplicate remove 11
DUPLICATE PREFERENCE IS 'CAPLUS, EMBASE'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L1
                    2 DUPLICATE REMOVE L1 (0 DUPLICATES REMOVED)
=> d 12 1-2 ibib abs
       ANSWER 1 OF 2
                             EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
                             2001134193 EMBASE
ACCESSION NUMBER:
                             Composition and therapeutic utility of conotoxins from genus Conus. Patent status 1996 - 2000.
TITLE:
AUTHOR:
                             Jones R.M.; Cartier G.E.; McIntosh J.M.; Bulaj G.; Farrar
                            V.E.; Olivera B.M.
R.M. Jones, Cognetix Inc., 421 Wakara Way, Salt Lake City,
CORPORATE SOURCE:
                            UT 84108, United States. rjones@cognetix.com
SOURCE:
                             Expert Opinion on Therapeutic Patents, (2001) 11/4
                             (603-623).
                             Refs: 51
                             ISSN: 1354-3776 CODEN: EOTPEG
COUNTRY:
                             United Kingdom
DOCUMENT TYPE:
                             Journal; General Review
                             800
FILE SEGMENT:
                                        Neurology and Neurosurgery
                             018
                                        Cardiovascular Diseases and Cardiovascular Surgery
                             030
                                        Pharmacology
                             032
                                        Psychiatry
                             037
                                        Drug Literature Index
                             039
                                        Pharmacy
LANGUAGE:
                             English
      ARY LANGUAGE: English
With an exponentially increasing body of scientific evidence pointing
toward the potential of conotoxins for treatment of a wide variety of
SUMMARY LANGUAGE:
       nervous system and associated neurological disorders, there has been an explosion of activity in this patent area with more than eighty new
       patents and PCT publications in the past five years. With the emergence of ziconotide (SNX-111, .omega.-conotoxin MVIIA) as the first clinically used
       conotoxin for treatment of a neurological disorder, the first part of the
       new millennium is likely to see many more new filings in this field. The
      majority of the applications from this period focus on those classes of conopeptides that interact with nicotinic acetylcholine receptors (nAChRs) together with those that block voltage-gated ion channels. This arena has to date been dominated by three research groups: Neurex (a wholly-owned subsidiary of Elan, South San Francisco, CA, USA), Xenome and the Institute for Molecular Bioscience (IMB), University of Queensland (Melbourne, Australia) and Cognetix (Salt Lake City, UT, USA) together
      (Melbourne, Australia) and Cognetix (Salt Lake City, UT, USA) together with the University of Utah Research Foundation and the Salk Institute for Biological Studies (La Jolla, CA, USA).
```

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 2000:241270 CAPLUS DOCUMENT NUMBER: 132:288779 \*\*\*chi\*\*\* TITLE:

Recombinant . .- \*\*\*conotoxin\*\*\*

peptides for inhibiting neuronal amine transporters Lewis, Richard James; Alewood, Paul Francis; Sharpe,

Iain Andrew

INVENTOR(S):

```
The Unive<u>rs</u>ity of Queensland, Australia
PATENT ASSIGNEE(S):
                               PCT Int. 101., 47 pp.
SOURCE:
                               CODEN: PIXXD2
DOCUMENT TYPE:
                               Patent
LANGUAGE:
                               English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                           KIND DATE
                                                     APPLICATION NO.
                                   20000413
                                                     wo 1999-AU844 19991001
      wo 2000020444
                           Α1
               AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
                DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
                CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
65 AA 20000413 CA 1999-2344765
                                                                          19991001
      CA 2344765
      AU 9964530
                            Α1
                                   20000426
                                                     AU 1999-64530
                                                                          19991001
      AU 757011
                                   20030130
                            В2
                                                     EP 1999-952156
                                                                          19991001
      EP 1117682
                                   20010725
                            Α1
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
      JP 2002526098
                            Ť2
                                  20020820
                                                     JP 2000-574555
                                                                          19991001
PRIORITY APPLN. INFO.:
                                                 AU 1998-6274
                                                                     A 19981002
                                                 WO 1999-AU844
                                                                     w 19991001
      The invention relates to an isolated, synthetic or recombinant <<
         ***chi*** - ***conotoxin*** peptide having the ability to inhibit a
      neuronal amine transporter, nucleic acid mols. encoding all or part of such peptides, antibodies to such peptides and uses and methods of
      treatment involving them.
REFERENCE COUNT:
                                      THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                                      RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> s neuronal amine transporter
L3
                2 NEURONAL AMINE TRANSPORTER
=> s neuronal noradrenaline transporter
               41 NEURONAL NORADRENALINE TRANSPORTER
=> s 13 or 14
               43 L3 OR L4
=> d his
      (FILE 'HOME' ENTERED AT 08:45:42 ON 29 AUG 2003)
      FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 08:46:04 ON 29 AUG 2003
L1
                 2 S CHI-CONOTOXIN
L2
                 2 DUPLICATE REMOVE L1 (0 DUPLICATES REMOVED)
L3
                 2 S NEURONAL AMINE TRANSPORTER
L4
                41 S NEURONAL NORADRENALINE TRANSPORTER
                43 S L3 OR L4
=> s 15 (p) 11
               1 L5 (P) L1
L6
  s 16 not 12
                0 L6 NOT L2
=> s chi-mria or chi-mrib
               4 CHI-MRIA OR CHI-MRIB
=> duplicate remove 18
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L8
                 1 DUPLICATE REMOVE L8 (3 DUPLICATES REMOVED)
=> s 19 not 11
               1 L9 NOT L1
L10
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=> d 110 1 ibib abs
                         MEDLINE on '
L10 ANSWER 1 OF 1
                      2001486070
ACCESSION NUMBER:
                                     MEDLINE
DOCUMENT NUMBER:
                      21419681
                                 PubMed ID: 11528421
                      Two new classes of conopeptides inhibit the
TITLE:
                      alpha1-adrenoceptor and noradrenaline transporter.
                      Sharpe I A; Gehrmann J; Loughnan M L; Thomas L; Adams D A;
AUTHOR:
                      Atkins A; Palant E; Craik DJ; Adams DJ; Alewood PF;
                      Lewis R J
CORPORATE SOURCE:
                      Institute for Molecular Bioscience, University of
                      Queensland, Brisbane 4072, Australia.
SOURCE:
                      NATURE NEUROSCIENCE, (2001 Sep) 4 (9) 902-7.
                      Journal code: 9809671. ISSN: 1097-6256.
PUB. COUNTRY:
                      United States
DOCUMENT TYPE:
                      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:
                      English
FILE SEGMENT:
                      Priority Journals
OTHER SOURCE:
                      PDB-1IEN; PDB-1IEO
ENTRY MONTH:
                      200109
ENTRY DATE:
                      Entered STN: 20010903
                      Last Updated on STN: 20010924
                      Entered Medline: 20010920
     Cone snails use venom containing a cocktail of peptides ('conopeptides')
     to capture their prey. Many of these peptides also target mammalian receptors, often with exquisite selectivity. Here we report the discovery of two new classes of conopeptides. One class targets
     alphal-adrenoceptors (rho-TIA from the fish-hunting Conus tulipa), and the
                                                                        second class targets the neuronal noradrenaline transporter (
                             ***Chi*** - ***MrIB***
         ***MrIA***
                      and
                                                          from the mollusk-hunting
                                    ***chi***
      C. marmoreus). rho-TIA and
                                                - ***MrIA***
                                                                  selectively
     modulate these important membrane-bound proteins. Both peptides act as
     reversible non-competitive inhibitors and provide alternative avenues for
      the identification of inhibitor drugs.
=> s (urinary or fecal) (w) incontinence
L11
          43501 (URINARY OR FECAL) (W) INCONTINENCE
=> s (cardiovascular disease) OR arrhythmia or (cornary heart failure) or (mood disorder) or depre
    4 FILES SEARCHED...
       1109450 (CARDIOVASCULAR DISEASE) OR ARRHYTHMIA OR (CORNARY HEART FAILURE
                  OR (MOOD DISORDER) OR DEPRESSION OR ANXIETY OR CRAVINGS OR
                (CHRONIC PAIN) OR (NEUROPATHIC PAIN) OR (INFLAMMATORY PAIN)
=> d his
     (FILE 'HOME' ENTERED AT 08:45:42 ON 29 AUG 2003)
     FILE 'MEDLINE, CAPLUS, 108:46:04 ON 29 AUG 2003
                             BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
L1
                S CHI-CONOTOXIN
L2
               2 DUPLICATE REMOVE L1 (0 DUPLICATES REMOVED)
L3
               2 S NEURONAL AMINE TRANSPORTER
              41 S NEURONAL NORADRENALINE TRANSPORTER
L4
L5
              43 S L3 OR L4
               1 S L5 (P) L1
L6
L7
               0 S L6 NOT L2
L8
               4 S CHI-MRIA OR CHI-MRIB
L9
               1 DUPLICATE REMOVE L8 (3 DUPLICATES REMOVED)
L10
               1 S L9 NOT L1
           43501 S (URINARY OR FECAL) (W) INCONTINENCE
L11
        1109450 S (CARDIOVASCULAR DISEASE) OR ARRHYTHMIA OR (CORNARY HEART FAIL
=> s 112 (p) 11
              0 L12 (P) L1
L13
=> s lewis richard/au
L14
            74 LEWIS RICHARD/AU
=> s alewood paul/au
            27 ALEWOOD PAUL/AU
=> s sharpe iain/au
L16
             1 SHARPE IAIN/AU
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=> s (114 or 115 or 116) and 11

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L17
              0 (L14 OR L15 OR L16)_AND L1
=> d his
     (FILE 'HOME' ENTERED AT 08:45:42 ON 29 AUG 2003)
     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 08:46:04 ON 29 AUG 2003
L1
               2 S CHI-CONOTOXIN
L2
L3
               2 DUPLICATE REMOVE L1 (0 DUPLICATES REMOVED)
               2 S NEURONAL AMINE TRANSPORTER
L4
              41 S NEURONAL NORADRENALINE TRANSPORTER
L5
              43 S L3 OR L4
L6
L7
               1 S L5 (P) L1 0 S L6 NOT L2
L8
               4 S CHI-MRIA OR CHI-MRIB
L9
               1 DUPLICATE REMOVE L8 (3 DUPLICATES REMOVED)
L10
               1 S L9 NOT L1
L11
           43501 S (URINARY OR FECAL) (W) INCONTINENCE
        1109450 S (CARDIOVASCULAR DISEASE) OR ARRHYTHMIA OR (CORNARY HEART FAIL
L12
               0 S L12 (P) L1
L13
              74 S LEWIS RICHARD/AU
L14
              27 S ALEWOOD PAUL/AU
L15
L16
               1 S SHARPE IAIN/AU
               0 S (L14 OR L15 OR L16) AND L1
L17
=> log y
COST IN U.S. DOLLARS
                                                     SINCE FILE
                                                                      TOTAL
                                                          ENTRY
                                                                    SESSION
FULL ESTIMATED COST
                                                         104.84
                                                                     105.05
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SINCE FILE

**ENTRY** 

-0.65

**TOTAL** 

-0.65

**SESSION** 

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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